

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of January 23, 2004.

All of the Examiner's objections and rejections are traversed.

Reexamination and reconsideration are respectfully requested.

The Office Action

The specification stands objected to because of an informality. Specifically, on page 7, paragraph [0040], the Examiner requires correction of the phrase "a circle 30 and a tail 32 are modified" which should read "a circle 36 and a tail 38 are modified."

Claims 1-3, 7, 8, 11 and 12 stand rejected under 35 U.S.C. §102(a) as being disclosed by U.S. Patent Application Document No. 20030007018 for Seni et al. (hereinafter Seni).

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Seni et al. as applied to claim 1, and further in view of Official Notice.

Claims 5 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Seni et al. as applied to claim 1, and further in view of U.S. Patent No. 5,889,523 issued to Wilcox et al. (hereinafter Wilcox).

Claims 14, 15, 17-20, 22 and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Seni et al. as applied to claim 1, and further in view of U.S. Patent No. 6,389,435 issued to Golovchinsky et al. (hereinafter Golovchinsky).

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Seni et al. as applied to claim 1, further in view of Golovchinsky, and further in view of U.S. Patent No. 6,470,095 issued to Mahoney et al.

Claims 6, 10 and 13 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-23 remain in this application.

The Art Rejections

In rejecting claim 1, the Examiner has compared a number of paragraphs in Seni to limitations as set forth in the rejected claim. Specifically the Examiner likens: paragraph [0026] of Seni to receiving a digital ink image, paragraphs [0015,0016,0019,0020] of Seni to converting the digital ink image, paragraph [0024] to

converting into structured object representations of the digital ink image, and paragraphs [0022-0023] to structured object representations which are editable by a structured text/graphics editor. Applicants respectfully traverse the Examiner's opinion with regard to Seni disclosing features set forth in claim 1.

In particular, Seni discloses a user interface technique for handwriting entry on PDAs, specifically, Seni deals with entering handwriting in a special area on the screen and, more specifically, Seni deals with handwriting recognition. This is unrelated to interpreting mixed text/graphics digital ink and creating structured representations. The present application and the limitations set forth in claim 1 are directed toward art different from handwriting recognition in at least two ways.

For one, embodiments of the present application, as recited in claim 1, convert a digital image to structured object representations "of the digital ink image" (as discussed on page 6, paragraph [0035]). On the other hand, as known in the art, recognized handwriting presented as formal typed text is no longer a representation of the image, it is a representation of characters that an application program recognizes as being in the image.

For another, embodiments of the present application convert the digital images to structured object representations which are editable by a structured text/graphics editor as also recited in claim 1. In particular, the claimed limitations deal with graphics as well as text, as is clear in the specification as discussed, for instance, in paragraphs [0037-0038].

In other words, while paragraph [0024] of Seni appears to permit a user to select certain handwriting preferences and recognition options, there is no suggestion or teaching that the inputted material is converted into structured object representations of the digital ink image which would permit, for example, the movement of the image such as illustrated in Figure 2C of the present application.

The concept of editing structured object representations converted from a received digital ink image, as recited in claim 1 and as further described in paragraph [0040] of the present application, is not taught by Seni in paragraphs [0022-0023]. While there is a reference to editing operations in these paragraphs, there is no teaching that these editing operations are on the structured data as taught in the present application.

Applicants respectfully submit, therefore, that independent claim 1 patentably defines over Seni and, thus, is in condition for allowance, as are claims 2-10, depending

therefrom.

The Examiner interpreted independent claim 11 as a system for performing the method of claim 1 and, consequently, rejected claim 11 on the same grounds as claim 11. Applicants submit, therefore, that independent claim 11, like claim 1, patentably defines over Seni and is condition for allowance. Likewise, claims 12-13, depending from claim 11, are also in condition for allowance.

With attention now to independent claim 14, the Examiner again uses Seni as applied to claim 1 in rejecting claim 14. Although acknowledging that Seni does not disclose "representations correlating to perceptually salient areas of the digital ink image," the Examiner applies Golovchinsky, col. 4, lines 58-67, to this claimed limitation. While this section of Golovchinsky discusses providing a perceptually motivated model of freeform digital ink mark that applies higher weight to more saliently marked terms, and therefore uses somewhat similar language, Applicants contend that this disclosure is teaching a substantially different concept than the present application.

Apparently, Golovchinsky applies a higher weight to terms that are marked with the bright color digital ink than those terms that are marked with a less salient digital ink.

On the other hand, claim 14 recites an image having a structured object representation of a digital ink image. The structured object representations are noted to correlate to perceptually salient areas of the digital ink image. Golovchinsky contains no concept of representing structure in existing digital ink. Rather, in Golovchinsky, perceptual salience lies in the colors of digital ink strokes, on an independent stroke-by-stroke basis. In the present application, perceptual structure is represented among collections of strokes.

In rejecting claim 14, the Examiner makes reference to "digital ink recognition disclosed by Seni." However, the rejected claim refers only to the representation of structure, not whether the structure was established by digital ink recognition processes (of which Seni is only tangentially related). Neither Seni nor Golovchinsky deal with perceptually salient areas of digital ink, nor with editability by structured text/graphics editors, nor to alternative representations of the digital ink images. Alternative hypotheses about word identities in handwriting recognition is significantly different from a representation for mixed text and graphics in which formal or informal representations of text and graphics objects can be swapped in and out by a user at will.

The concept of editing structured object representations correlating to perceptually salient areas of the digital image as recited in claim 14, and as discussed

in paragraph [0040] of the present application, is not taught by Seni or Golovchinsky. While there is a reference to editing operations in these paragraphs, there is no teaching that these editing operations are on the structured data as taught and claimed in the present application.

Applicants respectfully submit that independent claim 14 patentably defines over the cited references and is, therefore, in condition for allowance, as are claims 15-23, depending therefrom.

CONCLUSION

For the reasons detailed above, it is respectfully submitted all claims remaining in the application (Claims 1-23) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

No additional fee is believed to be required for this Amendment A. However, the undersigned attorney of record hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Deposit Account No. 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark Svat, at Telephone Number (216) 861-5582.

Respectfully submitted,

FAY, SHARPE, FAGAN,
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4/23/04
Date



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